

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1-22 (Cancelled).

23. (Previously Presented): A method of removing and disposing impurities contained in a target gas, comprising:

removing an impurity gas from the target gas while the target gas is in a gaseous state;

compressing the impurity gas to produce compressed impurity gas;

removing water from the compressed impurity gas to produce a dried compressed impurity gas; and

disposing the dried compressed impurity gas into an underground aquifer, wherein

the compressing is performed by a driving unit, and

the target gas includes a mixture of gas and oil.

24. (Previously Presented): The method according to claim 23, wherein the target gas includes natural gas.

25. (Cancelled):

26. (Previously Presented): The method according to claim 23, wherein the impurity gas includes carbon dioxide.

27. (Previously Presented): The method according to claim 23, wherein the impurity gas includes hydrogen sulfide.

28. (Previously Presented): The method according to claim 23, wherein the compressing is performed using a gas turbine.

29. (Previously Presented): The method according to claim 23, wherein the compressing is performed using a gas engine.

30. (Previously Presented): The method according to claim 23, wherein the compressing is performed using a steam turbine.

31. (Previously Presented): The method according to claim 23, further comprising:
removing carbon dioxide produced by a device that drives a compressor that performs the compressing; and

mixing the carbon dioxide with the impurity gas, wherein the compressing includes compressing a mixture of the carbon dioxide and the impurity gas.

32. (Previously Presented): The method according to claim 23, further comprising:

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collecting steam produced by a boiler that recovers a waste heat discharged from the gas turbine; and

using the steam as a heat source during removal of impurities.